

Original Article

The Relationship of Decision-Making Styles and Attributional Styles in Addicted and Non-addicted Men

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Abstract

Background: One of social problems which has affected our society and resulted in problems for different groups of people is drug abuse. This issue indicates a serious psychological, physical and social problem in community. Social skills have positive and successful influences in prevention of substance abuse. This includes the ability to explain events correctly and then appropriate decision making. This study compares decision making styles and attributional styles between addicted and non addicted men to recognize their role in addiction.

Methods: In this study, 200 addicted and non addicted men were randomly selected. Decision-making style and attributional style questionnaires were used. Data analysis was performed by independent Student's t and Pearson correlation tests.

Findings: The study population included 81 addicted and 90 non-addicted men. Addicted and non addicted men were significantly different in rational decision-making style ($P < 0.05$). Negative relationship was found between rational decision making and optimistic attribution style ($r = -0.305$, $P < 0.01$) and direct relationship was found between rational decision making and learned helplessness ($r = 0.309$, $P < 0.01$).

Conclusion: Our study showed that addicts are less rational in decision making and addicts that developed learned helplessness were less rational and did not have optimistic attribution style. These issues show that addiction institutions and therapists have to pay attention to cognitive factors for addiction prevention.

Keywords: Decision making style, Attributional style, Learned helplessness, Addiction.

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Introduction

One of social problem which has affected our society and resulted in problems for different groups of people is drug abuse. Addiction to legal and illegal drugs has been very widespread in the past few decades. This issue indicates a serious psychological, physical and social problem. In 2005, the number of substance abusers aging 15-64 was estimated by United Nations Office on Drug and Crime (UNODC) to be 200 million, i.e. 5% of total world population. Studies on drug abuse in our country showed that 13% of Iranian youth has experienced it at least once. Furthermore, official sources have estimated the number of addicts to be about 2 million persons in 2001. However some unofficial sources claimed the number to be about 6 million.¹

Social skills have positive and successful influences in prevention of substance abuse. The person who has these skills can behave appropriately in decision making process and lack of these skills can cause inappropriate decisions. These individuals prefer to rely on substance abuse in critical situation instead of using problem solving techniques to achieve equilibrium. Therefore, improving psychological and social skills such as decision making can protect people when they encounter risk factors of addiction.²

Traditional theories determine the general patterns of decision making as derived from systematic approach which are identical in all individuals. In these theories there are no significant differences between individuals. However, recent studies have emphasized how individual differences can lead to different choices and decisions. These researches indicated that patterns of decision making are strongly influenced by methods which a person processes his decision making situation. The difference of these processes may be due to emotions or personality traits. For example, anxious individuals may have a very sensitive monitoring system. Defects in the monitoring systems of substance abusers may lead to do more risky behaviors and they may use less likely decision making strategies.³

Some researchers suggested that substance abusers have neurological defects in decision making. But, Vassileva et al. showed that most of substance abusers do not have neurological

defects. They suggested that other risk factors may be involved in decision making.⁴

Substance abusers are weak in inhibition of some actions (going or not going, stopping an action). This issue may have a profound impact on decision making.⁵ Decision making styles (DMS) is a unique model that shows how a person answers to decision making situation or interpret the situation. We can understand why a person who is faced with a particular situation, use different processes of decision making through decision making styles theory.⁶

Another factor that increases a person's vulnerability is how a person specifies events which is named attributional style. Attributional style theory is based on the revised model of learned helplessness (LH) theory.⁷ LH results from cognitive, motivation and emotional deficits that occur after the experience of an uncontrollable event.⁸ This theory explains that an uncontrollable event will lead to inactivity. Therefore, a person who experiences this situation, does not make any attempt to improve it.⁹ Researchers have shown that decision making depends on many factors such as self-esteem or locus of control. Thunholm⁵ stated that rational decision making styles are positively related to internal locus of control but few researches has been done about a relationship between LH and DMS with regard to relative successes of prevention and treatment of drug abuse. Researchers state that it is necessary to study the role of individual differences which lead to formation of addictive behaviors and also their impacts on addiction treatment.¹⁰ The aim of this study was comparison of decision-making style of addicted and non-addicted men and studying the relationship between DMS and LH.

Methods

In this study, the decision-making styles of addicted and non-addicted men were compared and their relationship was studied. The subjects included 200 addicted and non-addicted men.

Decision-Making Style questionnaire was developed by Scott and Bruce¹¹ in 1995. This questionnaire assesses four styles of decision making (rational, intuitive, dependent and avoidant). They tested its reliability on military personnel, students and engineers and they

reported the range of Cronbach's alpha coefficient 0.77-0.85 for rational DMS, 0.78-0.85 for intuitive DMS, 0.62-0.86 for dependent DMS and 0.84-0.94 for avoidant DMS.

This questionnaire had 23 questions. Rational DMS subscale contained 8 questions and the other subscales contained 5 questions. All of the answers were graded on a Likert scale from 1 indicating completely agree to 5 indicating completely disagree and questions 4, 9, 1 were scored reversely. The reliability coefficient of DMS questionnaire (Cronbach's alpha) was also obtained 0.75 in Iran by Zare and Sheibany.¹²

Attribution style questionnaire was designed based on the revised theory of LH and included 36 questions that measured the person's attributional style for 6 positive events and 6 negative events. Two scores were obtained by this questionnaire, namely optimistic and pessimistic scores.

According to the definition of LH, people who are less optimistic and consequently more pessimistic are more likely to develop LH.

Therefore, the score of LH is obtained by subtracting the pessimistic and optimistic scores. Greater scores correspond to higher levels of LH. In Peterson et al.¹³ study, the Cronbach's alpha of this questionnaire was calculated as 0.96 for personalization dimension, 0.89 for stability dimension and 0.90 for globosity dimension. Khaje Amiri Khaledy determined the reliability coefficient of attributional style questionnaire in Iran as 0.78.¹⁴

To choose addicted men, 4 addiction treatment centers were randomly selected and non-addicted men were selected using random sampling in offices, factories and variety of neighbors. This resulted in a sample of 81 addicted and 90 non-addicted men. Independent t-test, Pearson correlation was employed using SPSS software, version 17.

Results

We found significant differences between addicts and non-addicts. They were significantly different in rational decision-making style ($P < 0.05$) (Table 1 and Histogram 1).

Table1: Mean difference of decision making styles in addicts and non addicts

	Rational decision making style	Intuitive decision making style	Dependent decision making style	Avoidant decision making style
t	*3.51	-0.85	-1.8	1.212
P_value	< 0.01	0.39	0.07	0.22
d.f	141.22	169	168	169

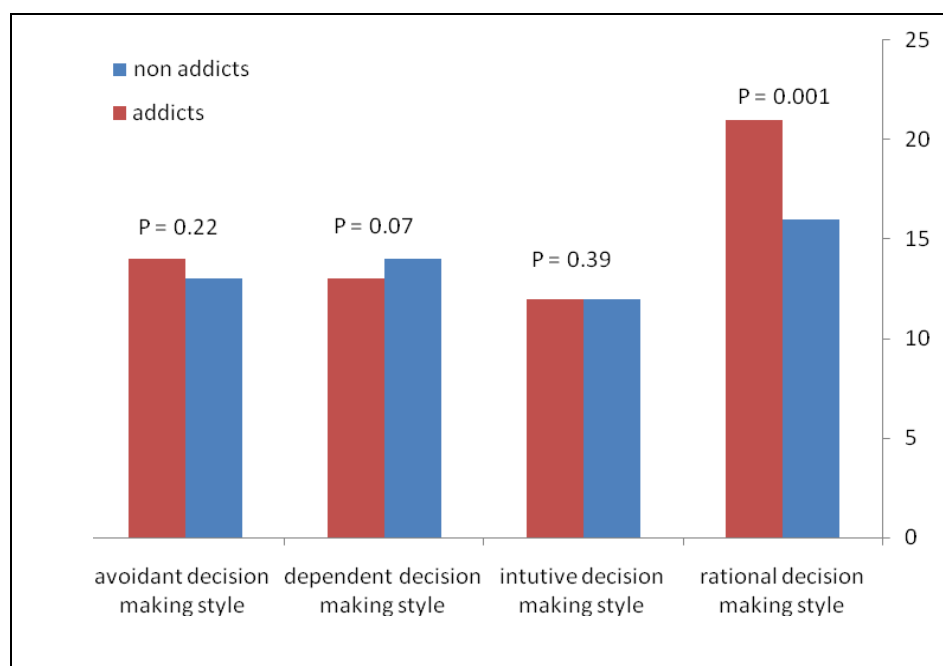


Figure 1. Mean difference of decision-making styles in addicts and non addicts

A negative relationship between rational decision making and optimistic attributional style in addicted men ($P < 0.01$, $r = -0.305$), internal attribution ($P < 0.01$, $r = -0.326$), and also stability of positive events ($P = 0.03$, $r = -0.237$) was found.

There was a positive relationship between rational decision making and LH in addicted men ($P = 0.01$, $r = 0.309$).

Discussion

According to our findings, addicted and non-addicted men were significantly different in rational decision-making style. Therefore, addicts are less rational in decision making. Heyman and Dunn¹⁵ stated that the person's vulnerability to addiction is due to differences in decision-making styles. Bechara et al.^{16,17} also showed that addicts were less sensitive to negative outcomes of their decisions and they paid more attention to immediate advantages of their decisions. Therefore they decided less rationally. They also showed that there was a biological defect in brain areas that affects in decision making in addicts and this defect lead to improper decision making, impulsive behavior and addiction. Vassileva et al.⁴ findings also showed that addicts have more problems in decision making.

According to this study, there was a negative relationship between rational DMS and internal attribution of positive events. This means that people who are less rational (gain higher scores in rational DMS), attribute more external cause

to positive events. In addition, there was a negative relationship between rational DMS and stable attribution for positive events. Therefore, whatever a person is less rational (gain higher scores in rational DMS) attribute less stable for positive events. There was a direct relationship between LH and rational DMS in addicted men. So, the addicts who are less rational, they more likely develop LH.

In this regard, Fontaine et al.¹⁸ stated that DMS has a moderate role in impacts of attribution style. This means that if a person has an appropriate decision making in spite of having a pessimistic attribution, he/she will less do antisocial behaviors. Baiocco et al.⁶ showed that people who have internal locus of control are more rational in DMS. Luzzo et al.¹⁹ found that people who have pessimistic attribution, act worse in decision making in comparison with others. According to this study, people who are responsible for their decisions (have internal attribution), make more effort to make better decision.¹⁹ Orchard also stated that one of the important aspects of attribution style is decision making.²⁰

At the end, according to what was found in this study, addicts have more cognitive problems in comparison with the non-addicts. Therefore, in order to increase the success rate of the treatment, it is necessary to pay more attention to cognitive factors.

Conflict of Interest: The Authors have no conflict of interest.

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مقایسه سبک‌های تصمیم‌گیری و سبک‌های اسنادی و بررسی رابطه آن‌ها در مردان معتاد و غیر معتاد

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چکیده

مقدمه: یکی از آسیب‌های اجتماعی که جامعه ما نیز به آن مبتلا است و برای گروه‌های مختلف مردم مشکل ایجاد می‌کند، پدیده اعتیاد به مواد مخدر می‌باشد که حاکی از بروز یک مشکل جدی در سلامت جسمی، روانی و اجتماعی در جامعه است. داشتن مهارت‌های اجتماعی در پیش‌گیری از اعتیاد نتایج مثبت و موفقیت آمیزی را به وجود می‌آورد. توانایی تبیین صحیح وقایع و سپس تصمیم‌گیری مناسب یکی از این مهارت‌ها محسوب می‌شود. این مطالعه به منظور بررسی و مقایسه سبک تصمیم‌گیری و سبک اسنادی معتادان و غیرمعتادان و نقش آن در اعتیاد انجام گرفت.

روش‌ها: در این پژوهش علمی-مقایسه‌ای، ۲۰۰ نفر مرد معتاد و غیرمعتاد به صورت تصادفی انتخاب شدند. از پرسش‌نامه‌های سبک تصمیم‌گیری و سبک‌های اسنادی برای بررسی این افراد استفاده شد. جهت تحلیل داده‌ها، آزمون‌های آماری t مستقل و همبستگی Pearson مورد استفاده قرار گرفت.

یافته‌ها: داده‌های به دست آمده از ۸۱ نفر معتاد و ۹۰ نفر غیر معتاد حاکی از آن بود که این دو گروه در سبک تصمیم‌گیری منطقی تفاوت معنی‌داری داشتند ($P < 0/05$). بین سبک تصمیم‌گیری منطقی و اسناد خوش بینانه رابطه منفی ($P < 0/05$)؛ $r = -0/305$ و بین سبک تصمیم‌گیری منطقی و درماندگی آموخته شده رابطه مثبت وجود داشت ($P < 0/01$)؛ $r = 0/309$.

نتیجه‌گیری: افراد معتاد در تصمیم‌گیری کمتر منطقی هستند. معتادانی که دچار درماندگی آموخته شده باشند نیز کمتر منطقی بوده، اسناد خوش بینانه‌ای ندارند. این یافته‌ها ضرورت توجه به عوامل روان‌شناختی و شناختی در پیش‌گیری و درمان اعتیاد را خاطر نشان می‌سازد.

واژگان کلیدی: سبک تصمیم‌گیری، سبک اسنادی، درماندگی آموخته شده، اعتیاد

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